



NOAA PLANS for MODIS



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EOS PROTOTYPE OPERATIONAL INSTRUMENTS



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- **Objectives**
 - » **Examine Alternatives and Associated Costs for Near Real-Time Delivery of POI Data to NOAA**
 - » **Examine Utilization of POI Data by NOAA in Meeting Warning and Forecast Mission**
 - » **Examine POI Instruments as Precursor to NPOESS Instrument Suite**



EOS PROTOTYPE OPERATIONAL INSTRUMENTS



- **EOS AM-1 Mission**
 - » MODIS
- **EOS PM-1 Mission**
 - » MODIS
 - » AIRS
 - » AMSR
- **EOS CHEM Mission**
 - » HIRDLS



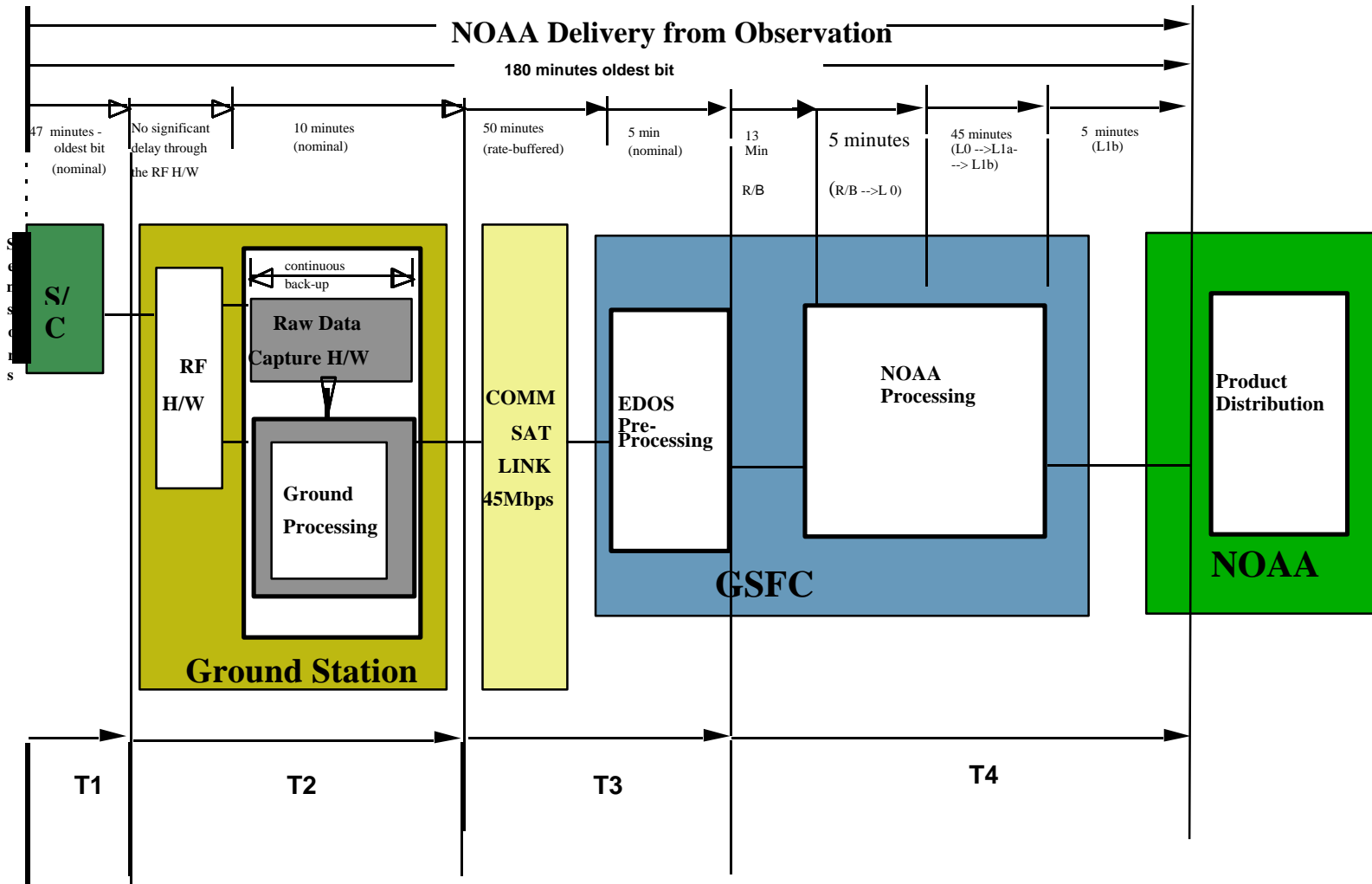
EOS PROTOTYPE OPERATIONAL INSTRUMENTS



- **Concept**
 - » **NOAA Equipment at EDOS**
 - » **Network Connection to Rate Buffered Data**
 - » **Level 1 Ocean Color Production at GSFC, Level 2 Production and Distribution at NOAA**
 - » **Level 1 and 2 Atmospheric Production at GSFC, Distribution at NOAA**
 - » **Level 1 and 2 Snow/Ice and Volcanic Ash Production at GSFC, Distribution at NOAA**



NRT Data Delivery Timeline





EOS POI PROCESSING



-
- **Hardware**
 - » **Origin 2000 - multi R10K CPU (8)**
 - » **RAID Storage (88GB, Expandable)**
 - » **O2 Control Terminal**
 - **Communications**
 - » **EDOS Networks - Move Rate Buffered Data**
 - » **GSFC to NOAA (FNS) - Move L1 and L2**
 - » **NOAA Networks - Product Distribution**



EOS POI PRODUCTS



-
- **Level 1b**
 - » **Calibrated, Geolocated Radiances**
 - **Atmospheric Products**
 - » **Cloud and Surface Classification Masks**
 - » **Atmospheric Profiles**
 - » **Aerosol Optical Depth and Size Distribution**
 - » **Precipitable Water**
 - » **Cloud Properties**



EOS POI PRODUCTS (cont)



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- **Land Products**
 - » **Snow Cover**
 - **Ocean Products**
 - » **Ocean Color**
 - » **Sea Surface Temperature**
 - » **Sea Ice Extent**



NOAA MODIS APPLICATIONS



- **Natural Hazards**
 - » **Fires**
 - » **Volcanoes**
 - » **Floods**
- **CoastWatch**
 - » **Biological Monitoring (Red Tide)**
 - » **Physical Monitoring (SST, Color)**
- **Regional NWS Forecasts**
 - » **Visualization**
 - » **Atmospheric Stability**
 - » **Clouds**



MODIS COVERAGE and DELIVERY SCHEDULE



- **Coverage**
 - » **Continental US (CONUS)**
 - » **Coastal Waters**
- **Timeliness**
 - » **Process Orbitally/per Contact**
 - » **Rate Buffered Data to NOAA Systems within 125 Minutes of Observation**
 - » **Selected Product Delivery within 180 Minutes of Observation**
- **Reliability**
 - » **95% of Products Delivered on Schedule**



NOAA's MODIS PRODUCT APPROVAL PROCESS



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- **MODIS Products from NOAA will be Managed as if Operational**
 - **Continuing Review by Product Oversight Panels (POPs)**
 - **POPs Receive Input from MODIS Science Team**
 - **Routine Release of Products Requires Approval from ORA and OSDPD Management (SPSRB)**
 - **NOAA Will Release NO Product Before It's Time**